

**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(only for new nonprovisional applications under 37 CFR 1.53(b))

| | |
|------------------------|---|
| Attorney Docket No. | 1875.0950001 |
| First Inventor | Christopher M. Ward |
| Title | Applications for Differential Crystal Oscillator (as amended) |
| Express Mail Label No. | |

APPLICATION ELEMENTS
See MPEP chapter 600 concerning utility patent application contents.**ADDRESS TO:**Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original, and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 132]
(preferred arrangement set forth below)
- Descriptive title of the Invention
- Cross Reference to Related Applications
- Statement Regarding Fed sponsored R & D
- Reference to sequence listing, a table,
or a computer program listing appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the Drawings (if filed)
- Detailed Description
- Claim(s)
- Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 50]
5. Oath or Declaration [Total Pages 2]
a. ☐ Newly executed (original or copy)
b. ☒ Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 18 completed)
i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s)
named in the prior application, see 37 CFR
1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76.

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program
(Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
a. ☐ Computer Readable Form (CRF)
b. Specification Sequence Listing on:
i. ☐ CD-ROM or CD-R (2 copies); or
ii. ☐ paper
c. ☐ Statements verifying identity of above copies

17858 U.S. PTO
10/783563

022304

ACCOMPANYING APPLICATION PARTS

9. ☒ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement (when there is an assignee) ☐ Power of Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☒ Preliminary Amendment
14. ☒ Two (2) Return Receipt Postcards (MPEP 503)
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☒ Other: Authorization under 37 C.F.R. § 1.136(a)(3)
☒ Other: The name of the assignee is: Broadcom Corporation

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☒ Divisional ☐ Continuation-in-Part (CIP)
Prior application information: Examiner Mis, D.of prior application No: 09/438,689
Art Unit: 2817

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS☒ Customer Number 26111or ☐ Correspondence address below

| | | | | |
|---------|---|-----------|--|----------|
| NAME | STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. | | | |
| | Attorneys at Law | | | |
| ADDRESS | | | | |
| CITY | | STATE | | ZIP CODE |
| COUNTRY | | TELEPHONE | | FAX |

| | | | |
|-------------------|-------------------------|-----------------------------------|------------------|
| NAME (Print/Type) | Timothy A. Doyle | Registration No. (Attorney/Agent) | 51,262 |
| SIGNATURE | <u>Timothy A. Doyle</u> | Date | <u>23 Feb 04</u> |

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

13281 U.S. PTO
022304

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTO/SB/17 (08-03)
Approved for use through 07/31/2006. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 1,154.00

Complete if Known

| | |
|----------------------|-------------------|
| Application Number | To Be Assigned |
| Filing Date | February 23, 2004 |
| First Named Inventor | Ward et al. |
| Examiner Name | To Be Assigned |
| Art Unit | To Be Assigned |
| Attorney Docket No. | 1875.0950001 |

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit card ☐ Money Order ☒ Other** ☐ None
** Charge any deficiencies or credit any overpayments in the fees or fee calculations of Parts 1, 2 and 3 below to Deposit Account No. 19-0036.

☐ Deposit Account
Deposit Account Number 19-0036

Deposit Account Name: Sterne, Kessler, Goldstein & Fox P.L.L.C.

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any over payments

☐ Charge any additional fee(s) during the pendency of this application

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Small Entity

| Fee Code | Fee (\$) | Fee Code | Fee (\$) | Fee Description | Fee Paid |
|----------|----------|----------|----------|------------------------|----------|
| 1001 | 770 | 2001 | 385 | Utility filing fee | 770.00 |
| 1002 | 340 | 2002 | 170 | Design filing fee | |
| 1003 | 530 | 2003 | 265 | Plant filing fee | |
| 1004 | 770 | 2004 | 385 | Reissue filing fee | |
| 1105 | 160 | 2005 | 80 | Provisional filing fee | |

SUBTOTAL (1) (\$) 770.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

| Extra | Fee from below | Fee Paid |
|---------------------------|----------------|----------|
| Total Claims 8 - 20** = 0 | X 18.00 | = 0 |
| Indep. Claims 7 - 3** = 4 | X 86.00 | = 344.00 |
| Multiple Dependent | 290.00 | = 0 |

| Large Entity | Small Entity | Fee Code | Fee (\$) | Fee Code | Fee (\$) | Fee Description |
|---------------------------|--------------|----------|----------|----------|----------|---|
| | | 1202 | 18 | 2202 | 9 | Claims in excess of 20 |
| | | 1201 | 86 | 2201 | 43 | Independent claims in excess of 3 |
| | | 1203 | 290 | 2203 | 145 | Multiple dependent claim, if not paid |
| | | 1204 | 86 | 2204 | 43 | **Reissue independent claims over original patent |
| | | 1205 | 18 | 2205 | 9 | **Reissue claims in excess of 20 and over original patent |
| SUBTOTAL (2) (\$) 344.00 | | | | | | |

**or number previously paid, if greater; For Reissue, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Small Entity

| Fee Code | Fee (\$) | Fee Code | Fee (\$) | Fee Description | Fee Paid |
|----------|----------|----------|----------|--|----------|
| 1051 | 130 | 2051 | 65 | Surcharge - late filing fee or oath | |
| 1502 | 50 | 2052 | 25 | Surcharge-late provisional filing fee or cover sheet | |
| 1053 | 130 | 1053 | 130 | Non-English specification | |
| 1812 | 2,520 | 1812 | 2,520 | For filing a request for ex parte reexamination | |
| 1804 | 920* | 1804 | 920* | Requesting publication of SIR prior to Examiner action | |
| 1805 | 1,840* | 1805 | 1,840* | Requesting publication of SIR after Examiner action | |
| 1251 | 110 | 2251 | 55 | Extension for reply within first month | |
| 1252 | 420 | 2252 | 210 | Extension for reply within second month | |
| 1253 | 950 | 2253 | 475 | Extension for reply within third month | |
| 1254 | 1,480 | 2254 | 740 | Extension for reply within fourth month | |
| 1255 | 2,010 | 2255 | 1,005 | Extension for reply within fifth month | |
| 1401 | 330 | 2401 | 165 | Notice of Appeal | |
| 1402 | 330 | 2402 | 165 | Filing a brief in support of an appeal | |
| 1403 | 290 | 2403 | 145 | Request for oral hearing | |
| 1451 | 1,510 | 1451 | 1,510 | Petition to institute a public use proceeding | |
| 1452 | 110 | 2452 | 55 | Petition to revive - unavoidable | |
| 1453 | 1,330 | 2453 | 665 | Petition to revive - unintentional | |
| 1501 | 1,330 | 2501 | 665 | Utility issue fee (or reissue) | |
| 1502 | 480 | 2502 | 240 | Design issue fee | |
| 1503 | 640 | 2503 | 320 | Plant issue fee | |
| 1460 | 130 | 1460 | 130 | Petitions to the Commissioner | |
| 1807 | 50 | 1807 | 50 | Processing fee under 37 CFR 1.17(q) | |
| 1806 | 180 | 1806 | 180 | Submission of Information Disclosure Stmt | |
| 8021 | 40 | 8021 | 40 | Recording each patent assignment per property (times number of properties) | 40.00 |
| 1809 | 770 | 2809 | 385 | Filing a submission after final rejection (37 CFR 1.129(a)) | |
| 1810 | 770 | 2810 | 385 | For each additional invention to be examined (37 CFR 1.129(b)) | |
| 1801 | 770 | 2801 | 385 | Request for Continued Examination (RCE) | |
| 1802 | 900 | 1802 | 900 | Request for expedited examination of a design application | |

Other fee (specify) _____

* Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 40.00

SUBMITTED BY

| | | | | | |
|-------------------|------------------|-----------------------------------|-----------|-----------|--------------|
| Name (Print/Type) | Timothy A. Doyle | Registration No. (Attorney/Agent) | 51,262 | Telephone | 202-371-2600 |
| Signature | | Date | 23 Feb 04 | | |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Ward *et al.*

Appl. No. *To Be Assigned*
(Divisional of Appl. No. 09/438,689)

Filed: February 23, 2004

For: **Applications for Differential
Crystal Oscillator** (as amended)

Confirmation No. *To Be Assigned*

Art Unit: *To Be Assigned*

Examiner: *To Be Assigned*

Atty. Docket: 1875.095000I

**Authorization To Treat A Reply As Incorporating An Extension Of
Time Under 37 C.F.R. § 1.136(a)(3)**

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

The U.S. Patent and Trademark Office is hereby authorized to treat any concurrent or future reply that requires a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. The U.S. Patent and Trademark Office is hereby authorized to charge all required extension of time fees to our Deposit Account No. 19-0036, if such fees are not otherwise provided for in such reply.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Timothy A. Doyle
Attorney for Applicants
Registration No. 51,262

Date: 23 FEB 04

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*Admitted only in Maryland
*Admitted only in Virginia
•Practice Limited to
Federal Agencies

February 23, 2004

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Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Mail Stop Patent Application

Re: U.S. Non-Provisional Utility Patent Application under 37 C.F.R. § 1.53(b)
(*Divisional of Appl No. 09/438,689; Filed: November 12, 1999*)
Appl. No. To Be Assigned; Filed: February 23, 2004
For: **Applications for Differential Crystal Oscillator** (as amended)
Inventors: Ward *et al.*
Our Ref: 1875.095000I/JTH/TAD

Sir:

The following documents are forwarded herewith for appropriate action by the U.S.
Patent and Trademark Office:

1. PTO Fee Transmittal (Form PTO/SB/17);
2. PTO Utility Patent Application Transmittal (Form PTO/SB/05);
3. U.S. Utility Patent Application entitled:

Applications for Differential Crystal Oscillator (as amended)

and naming as inventors:

Christopher M. Ward
Pieter Vorenkamp

the application consisting of:

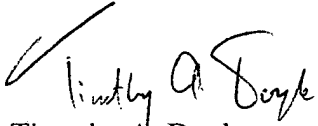
- a. An Application Data Sheet (37 C.F.R. § 1.76);
 - b. A copy of the executed Declaration and Power of Attorney for Patent Applications, as originally filed in U.S. Appl. No. 09/438,689;
 - c. A specification containing:
 - i. 119 pages of description prior to the claims;
 - ii. 12 pages of claims (41 claims);
 - iii. a one (1) page abstract; and
 - d. 50 sheets of drawings: (Figures 1-23, 24A-24C, 25-43, 44A-44B, and 45-58);
- 4. Authorization to Treat a Reply As Incorporating An Extension of Time Under 37 C.F.R. § 1.136(a)(3);
 - 5. Recordation Form Cover Sheet;
 - 6. A copy of the executed Assignment to Broadcom Corporation, as filed in U.S. Appl. No. 09/438,689, recordation of which is hereby respectfully requested;
 - 7. A Preliminary Amendment Under 37 C.F.R. § 1.115;
 - 8. Letter to the Draftsman: Submission of Formal Drawings;
 - 9. 50 sheets of formal drawings, approval of which is respectfully requested;
 - 10. Two (2) return postcards; and
 - 11. Form PTO-2038 Credit Card Payment Form for \$ 1,154.00 to cover:
 - \$ 770.00 Filing fee for patent application;
 - \$ 40.00 Assignment recordation fee; and
 - \$ 344.00 Fee for excess claims.

Commissioner for Patents
February 23, 2004
Page 3

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible. The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in black ink, appearing to read "Timothy A. Doyle". The signature is written in a cursive, flowing style with a large initial 'T'.

Timothy A. Doyle
Attorney for Applicants
Registration No. 51,262

TAD/JTH:slw
Enclosures

\\ODMAM\HODMA\SKGF_DC1\215249\1
SKGF Rev. 2/12/02 dcw; 9/5/02 mac; 4/29/03 svb

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Ward *et al.*

Appl. No. *To Be Assigned*
(Divisional of Appl. No. 09/438,689)

Filed: February 23, 2004

For: **Applications for Differential
Crystal Oscillator** (as amended)

Confirmation No. *To Be Assigned*

Art Unit: *To Be Assigned*

Examiner: *To Be Assigned*

Atty. Docket: 1875.095000I

Letter to PTO Draftsman: Submission of Formal Drawings

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

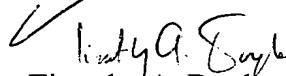
Sir:

Submitted herewith are fifty (50) sheets of formal drawings with Figures 1-23, 24A-24C, 25-43, 44A-44B, and 45-58, corresponding to the informal drawings submitted with the above-captioned application. Identification of the drawings is provided in accordance with 37 C.F.R. § 1.84(c). Acknowledgment of the receipt, approval, and entry of these formal drawings into this application is respectfully requested.

It is not believed that an extension of time is required, other than any already provided herewith. However, if an extension of time is needed to prevent abandonment of the application, then such extension of time is hereby petitioned. The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Timothy A. Doyle
Attorney for Applicants
Registration No. 51,262

Date: 23 Feb 04

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SKGF_DC1:233123.1